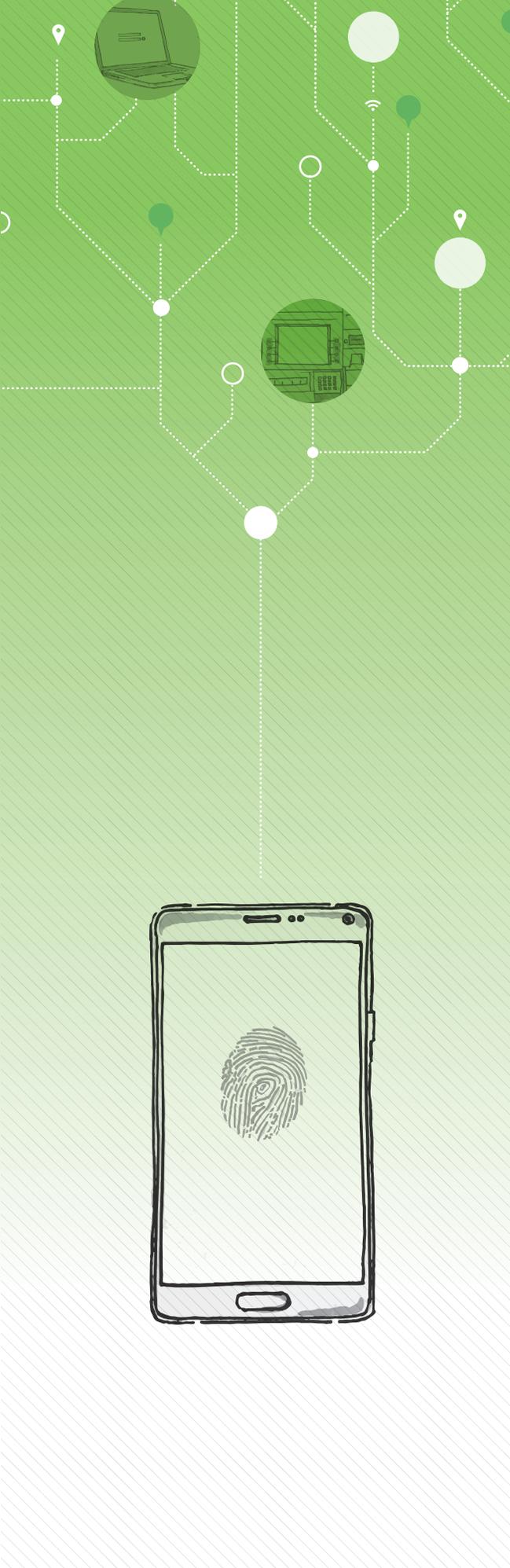




Senior IT's Guide to

Unlocking the Potential of the Internet of Things

Mobility experts share Internet of Things use cases and advice



🔌 Imagine a world where everything, from toasters to cars, is connected to the internet – and all of these things communicate with each other.

In this world, people access information that helps make their lives more convenient and efficient. There are driverless cars on the roads. Cities communicate available parking spaces to those cars. Metropolitan areas automatically measure and curtail energy and pollution levels. People on the street are notified of public safety concerns instantly. Homes automatically gauge families' optimum comfort levels and adjust thermostats to reflect those temperature settings. Healthcare professionals monitor a patient's health status via connected devices and use the collected data to make better medical decisions.

Some of these things are already possible, and those that aren't may soon be, thanks to the Internet of Things (IoT). Gartner defines IoT as the following:

[A] network of dedicated physical objects (things) that contain embedded technology to sense or interact with their internal state or external environment. The IoT comprises an ecosystem that includes things, communications, applications, and data analysis.

At a very base level, the IoT is the way information flows to people from all kinds of devices. But why is this important? And why are people excited about it?

What Lies Beneath

To answer these questions, we must look to the end-goal of the IoT. As Hyoun Park, Chief Research Officer of Blue Hill Research, puts it, “The fundamental goal of the IoT is to measure and track everything that matters.” With this in mind, the IoT represents simplicity and convenience. It represents personal and business empowerment, which translates to increased productivity. It means better visibility through the tracking and analysis of data resulting in reduced guesswork and better risk management. Consequently, it represents a better connection with people and their surrounding environment.

Chris Koeneman, Senior VP of Sales at MOBI, offers an example of the IoT in play today: “An HVAC company, while trying to optimize their heating and cooling systems, noticed a correlation between regional weather and sales of their products. This information was valuable to a number of hardware stores in meeting the sales demands of these products.” The value of the IoT is the data it collects, and how we can analyze and learn from that information.

Three Challenges Facing IoT

This free-flow of data, many times confidential in nature, presents major challenges: The first challenge is accuracy. If the data that these “things” collect is inaccurate, then the data’s analysis is skewed. For example, this can be a major issue to the healthcare realm, where accuracy of data can be the difference between life and death.

The second challenge is, in order to scale the massive growth the IoT calls for, technology needs to become standardized. As Park puts it:

IoT has very few standards as of today, whether it comes to hardware standards, data standards, billing standards, or even monetization standards. There will be pain in having to deal with the vast variety of IoT platforms that will be used to manage the data streaming, security, billing, and applications associated with the IoT.

Think of how European wall-plugs are different from those in the United States. On a technological scale, this type of inconsistency could present an issue when synthesizing data. If there are no rules to how data is collected, then analyzing the information becomes more difficult. IoT is a move toward a more simplistic and efficient world, while a lack of standardization hinders progress.

The third challenge is privacy and security. When IoT gathers massive amounts of information, there becomes a risk of keeping it in the proper hands. Timothy C. Colwell, Senior VP for AOTMP who oversees Efficiency First Adoption, states that, “Uncontrolled

Three challenges to the Internet of Things:

- 1) Accuracy of Data*
- 2) Standardization of Technology*
- 3) Privacy and Security*



endpoints are highly susceptible to security breaches and fraudulent activity that exposes owners to financial and information loss.” No matter how large or small the security breach, exposure of confidential personal and business information could be devastating.

Compounded with these challenges, technology is the cornerstone upon which IoT is founded. According to Daniel Kellmerit and Daniel Obodovski, the authors of *The Silent Intelligence: The Internet of Things*, technology development is driven by three things: Miniaturization (making things smaller and more powerful), affordability, and de-wiring (going wireless). When these three things aren’t working in unison, it becomes difficult for technology, thus IoT, to grow.

Managed Mobility Services

But there is one type of service that specifically targets many of these challenges: Managed Mobility Services (MMS). MMS offers better visibility of data, while not compromising security; empowers people to take greater control of their mobility; empowers businesses to focus funds on other strategic initiatives; and promotes efficiency. As Park states:

From a technical perspective, the goals of MMS are to make sure that everybody’s mobile environments are optimized to conduct work effectively.

In many ways, MMS and IoT have the same goal: simplicity and convenience through better managing people’s needs. MMS providers help navigate complex mobility issues so that businesses gain better visibility into, and control over, their mobile devices. This visibility contributes to the value MMS has to play. As MOBI President Mitch Black states, “MMS is significantly valuable in the Internet of Things because it can maintain visibility and give real-time feedback on how, where and who is using a device.”

In addition, MMS represents a business extension and process transformation through cost-savings. Park says that in order to achieve these cost-savings, MMS must create “an optimal environment for sourcing, purchasing, and paying for assets and services.”

Furthermore, MMS providers manage logistics and mobility management integration, often in the form of Software as a Service (SaaS) and Mobile Device Management (MDM) applications, which serve to protect devices from security breaches.

With an emphasis on making the world more mobile, and having that mobility be affordable, MMS fulfills two of the requirements (affordability and de-wiring) that technology needs to grow. MMS

Three technology drivers:

- 1) Miniaturization
- 2) Affordability
- 3) De-wiring



helps solve some of the rising challenges associated with IoT through increasing visibility, providing better data collection and analysis, and offering better security of that information.

Greater connectivity is about the improvement of people's standard of living. The advancement of technology's interconnectivity with humans means companies that facilitate such growth and convenience without compromising values, such as security and accuracy, will be best positioned for growing revenue in this changing landscape. To be successful in IoT, Kellmeyer and Obodovski claim that "businesses must do two things: Make it easy for people to accomplish tasks, and provide useful, relevant and accurate information."

MMS + IoT

The shared goals between MMS and IoT mean that MMS is well-positioned to be a major proponent and player in the advancement of IoT. As Park states, "The value of MMS comes from not having to commit in-house resources to keeping up with the insanely fast pace of mobile change while maintaining a competitive technology infrastructure in a cost-effective manner." Without having to increase headcount and funds to keep up with technology changes, companies can free themselves to focus more on the goal of their business: doing business.

Joe Basili, the Managing Director of TEMIA, says:

In this new IoT world, MMS has the right combination of flexibility to track a wide range of assets and rigor to manage expenses. In addition, MMS has a long-standing track record of integration.

With an increasingly more mobile future in the world of IoT, MMS becomes the best model for practice. And according to Black, many companies are already noticing the value of MMS in the evolution of IoT: "Nearly 50% of [MOBI's](#) Customer Advisory Board noted the IoT as a huge driver in their 2016 initiatives."

Conclusion

Gartner predicts that, by 2020, there will be 25 billion connected things and Cisco believes it's going to be 50 billion. With these numbers in mind, it becomes imperative for enterprises to prepare accordingly. As Colwell suggests, "MMS has the potential to bring discipline to IoT technology in the areas of asset control, service control, carrier management, utilization management, expense

"MMS: The only sane way to manage IoT."

*- Hyoun Park,
Chief Research Officer
Blue Hill Research*



“60% of businesses are using some form of IoT already.”  TWEET

*- Peggy Smedley,
Editorial Director
Connected World
Magazine*

management, security management, deployment logistics, and end-of-life logistics.” Because of these abilities, Park posits that MMS will become “The only sane way to manage IoT in the mid-term and long-term.”

As IoT becomes a force for development, businesses will need an ally to maintain stability as they evolve to match changes in technology. According to Peggy Smedley, the Editorial Director of Connected World Magazine, “60% of businesses are using some form of IoT already.” And this number will only grow as IoT becomes more prevalent. As Park states, “Somebody is going to have to handle the logistics, invoicing, and support for these devices...this shows the inevitable need for MMS.” Therefore, if a company isn’t prepared to manage the growth of IoT effectively in-house, MMS is the best solution to managing wireless technology. The impact IoT brings to interconnectivity and convenience will be substantial, and it becomes our choice, as we look to the future, how best to get there.

Sources:

- *Mitch Black, President of MOBI*
- *Hyoun Park, Chief Research Officer of Blue Hill Research*
- *Chris Koeneman, Senior Vice President of Sales at MOBI*
- *Timothy C. Colwell, Senior Vice President for AOTMP who oversees Efficiency First Adoption*
- *Joe Basili, the Managing Director of TEMIA*
- *Peggy Smedley, the Editorial Director of Connected World Magazine*
- *The Silent Intelligence: The Internet of Things by Daniel Kellmereit and Daniel Obodovski*

To see how MOBI
can help you
manage mobility,
visit:
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